THE STATUS OF THE GENERAL PRACTITIONER (Page 245)

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South African Medical Journal
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# CALCIFICATION OF THE LEFT ATRIUM

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Calcium deposits in the heart are encountered frequently. Calcification of the coronary vessels is a common finding at post-mortem examination and occurs usually in areas of atheromatous degeneration. Such calcified plaques are demonstrable radiologically and have been reported *ante mortem* with confirmation later.[1]

A far commoner type of calcification radiologically, is that associated with pericardial disease. Extensive calcification in the pericardium is common in the Bantu in South Africa following tuberculous pericarditis, and pericardial calcification of other etiologies is frequent.

Calcification in the cusps of aortic or mitral valves following endocarditis of differing etiologies can be detected radiologically, particularly on fluoroscopy. In routine chest films, they are usually missed on account of their movement during the exposure, and on account of the dense heart shadow being penetrated inadequately to reveal a small calcareous density. Walk[2] in a series of 33 cases examined radiologically and coming to autopsy, missed only three cases proved to have calcareous deposits in the valves, and made no false diagnosis of calcium deposits.

Calcification of the myocardium is not common. It may occur following infarction, and calcification in myocardial hydatid cysts has been described. Calcification of the atrial myocardium is even rarer. Kerley[3] in the *Text-Book of X-ray Diagnosis*, shows an illustration of a case noted by Evan Bedford on screening. The patient in this case was suffering from mitral stenosis. The illustration accompanying this report was the only radiograph of the condition known to the author. The following case is presented as a further example of left atrial calcification, also of rheumatic etiology.

*Case History.* Mrs. M. B. G., a European married woman of 34 years, was admitted with a history of palpitation and dyspnoea, aggravated on exertion, and becoming progressively more severe over the previous five years.

At the age of seven years, she had been confined to bed for six months by the family doctor with a diagnosis of a 'leaking valve'. She had several attacks of joint pains, which were vaguely labelled 'growing pains'. She is frequently conscious of a strange praecordial noise, loud enough to be heard across the dining table, and synchronous with the heart beat. She had had two instrumental deliveries, and her youngest child is 12 years old.

Examination revealed a loud musical systolic murmur over the praecordium, maximal over the the 2nd, 3rd and 4th interspaces to the left of the sternum. An inconstant presystolic murmur was noted at some examinations. The pulmonic second sound was loud and slapping. The blood pressure was 110/75 mm. Hg. and the pulse rate 80 per minute. The laboratory investigations done showed no significant or relevant changes.

Cardiac catheterization revealed no increase in pressures in the right-sided chambers or in the pulmonary arteries. The oxygen content of the right atrial, ventricular and pulmonary arterial blood was normal. The E.C.G. showed no marked changes. The phonocardiogram showed the systolic murmur and an inconstant diastolic noise, probably an inaudible third heart sound (Fig. 1).

*Radiology.* X-ray examination showed cardiac enlargement (Fig. 2), probably affecting both ventricles. A typical left atrial oesophageal indentation was not present, but the cardiac configuration nevertheless was highly suggestive of left atrial enlargement.

The original films showed no evidence of the calcified opacity in the left atrial region but, on screening, a C-shaped density was noted in the lateral position. On rotation, the calcified area conformed closely to the position of the left atrium. Pulsation was vigorous and appeared to be transmitted from the adjacent ventricle. No contractile pulsation could be detected. The absence of this opacity on the original films was considered due to the transmitted pulsation of the atrium during the exposure. This was confirmed by repeating the films with a minimal exposure (1/50 second), when the opacity became clearly evident (Figs. 3 and 4).

The differential diagnosis in this case presented few alternatives.

A hydatid cyst of the myocardium would have to be unusually large to give this shadow, and would have to conform to the normal position and contours of the left atrium—an unlikely occurrence.

Calcification of the enveloping pericardium was considered, but the pericardium does not follow the auricular walls so closely as to form a C in the lateral view. In fact, the visceral layer of the pericardium bridges the left auricle and the adjacent chambers quite superficially.[4]

The remaining possibility is calcification of the atrial myocardium itself, occurring probably secondary to a

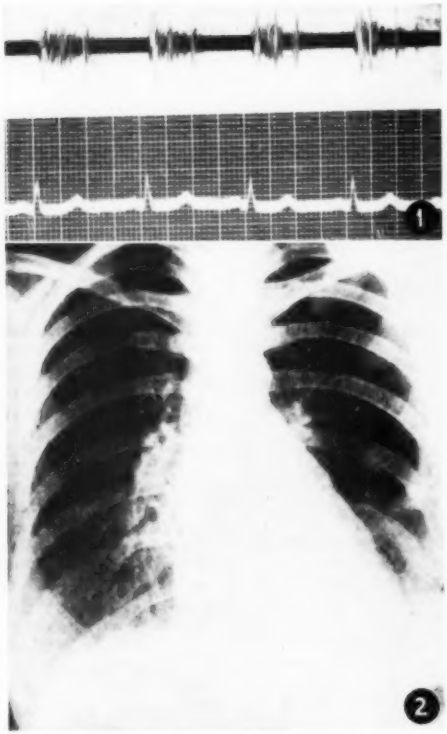


*Fig. 1.* Phonocardiogram showing the systolic murmur and a third sound in the fourth complex.
*Fig. 2.* Postero-anterior projection illustrating cardiac enlargement and flattening of the pulmonary artery segment. The cardiac configuration is of the type seen with mitral stenosis.

rheumatic myocarditis many years before, and associated with mitral stenosis.

*Discussion.* This case presents some unusual features. The history is highly suggestive of attacks of rheumatic fever, involving the heart, and causing murmurs which led to a diagnosis of valvular disease. There were probably several attacks of myocarditis which doubtless involved the myocardium of the left atrium, and this chamber appears to have borne the brunt of the attack.

Calcification of the myocardium, and possibly of the endocardium of this chamber is probably the end-result of the rheumatic inflammatory process, but in the present case, the distribution of the lesion and particularly of the calcification following the lesion, is unusual.

SUMMARY

A case of calcification of the myocardium of the left atrium following rheumatic myocarditis is presented.

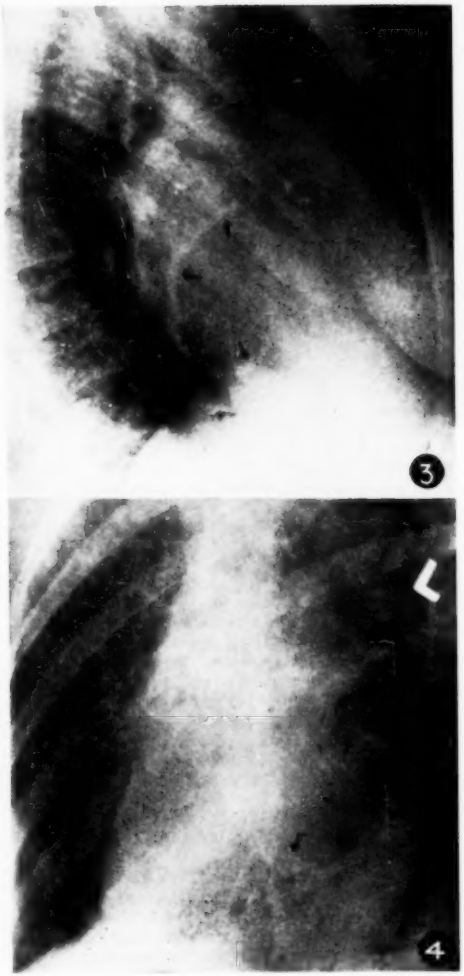


*Fig. 3.* Right anterior oblique projection. The C-shaped calcified atrium is indicated by arrows.
*Fig. 4.* Left anterior oblique projection. The calcified atrium is indicated by arrows.

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South African Medical Journal
Suid-Afrikaanse Tydskrif vir Geneeskunde

## VAN DIE REDAKSIE

### DIE HIPOTHALAMUS

Die bestudering van die groep kerne van die hipothalamus aan die onderent van die brein is rykelik beloon. Daar is gevind dat baie kliniese sindrome van belang aan letsels van die hipothalamus te wyte is. Die slaperigheid en gedragsversteurings wat dikwels op harsingontstekings volg, kan die gevolg van 'n geïsoleerde letsel van die hipothalamus wees. Gewasse van die derde harsingkamer veroorsaak as gevolg van aantasting van die hipothalamus lusteloosheid, geheueverlies in verband met die jongste gebeurtenisse en versteurings van die oordeel, simptome wat in verband gebring is met letsels van die frontale lobbe as kenmerkend daarvan. Neuro-chirurge is soms gedurende manipulering naby die vloer van die derde kamer uit die veld geslaan deur die ontstaan van koorsagtigheid by die pasiënt [1] of deur 'n skielike uitbarsting van onbetaamlike waansinnige gedrag.[2] Die vet-genitale sindroom van Fröhlich wat soms idiopaties is, is dikwels die gevolg van 'n letsel van die hipothalamus en *diabetes insipidus* is 'n algemene simptoom van siekte in hierdie omgewing.

Die verhouding waarin die hipothalamus tot die onwillekeurige senuweestelsel staan, is welbekend. Die uitvoeringsmeganismes in die hipothalamus beheer die pols- en asemhalingsnelhede, die bloeddruk, die temperatuur, die tonus van die hol ingewande en die algemene peil van aandagtigheid van die individu. Die hipothalamus beheer dus die *interne omgewing* van die liggaam en speel 'n lewensbelangrike rol in die liggaamlike reaksies waarmee 'n mens op veranderinge in sy omgewing reageer.[3] (Die thalamus met sy uitgebreide skorsverbindings het meer te doen met prikkels wat in die uitwendige omgewing ontstaan.) Die hipothalamus beheer daarbenewens die liggaamlike reaksies wat die verskillende emosies vergesel.

### VERBINGINGS TUSSEN DIE HIPOTHALAMUS EN DIE FRONTALE LOB

Onlangse ondersoek het aan die lig gebring dat die hipothalamus regstreekse verbindings met die prefrontale breinskors het. Le Gros Clark [4] het inderdaad die mening uitgespreek dat die prefrontale skors die projeksiegebied van die hipothalamus is. Daar is dus 'n nouer verwantskap tussen hierdie wyd verskillende breinlae as wat vermoed is. Daar is nou aangetoon dat die primitiewe onwillekeurige meganismes wat met instinkmatige reaksies gepaard gaan, in verband staan met senuweebedrywighede wat op die hoogste funksionele peil van die brein plaasvind.

Deur die operasie van lobotomie word die frontale skors afgesny van die thalamus en die hipothalamus,

1. Alpers, B. J. (1936): Arch. Neurol. Psychiat., **35**, 30.
2. Foerster, O. *Aangehaal deur Nielsen*, J. M. (1946): *Clinical Neurology*, 2de hersiene uitg. New York: Paul B. Hoeber, Inc.
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## EDITORIAL

### THE HYPOTHALAMUS

Study of the hypothalamic group of nuclei at the base of the brain has been richly rewarded. Many important clinical syndromes were found to be due to lesions of the hypothalamus. The somnolence and behaviour disorders which frequently follow encephalitic infections can be the result of an isolated hypothalamic lesion. Tumours of the third ventricle, by involving the hypothalamus, cause apathy, loss of memory for recent events, and disturbance of judgment, symptoms which had been characteristically associated with lesions of the frontal lobes. During manipulation near the floor of the third ventricle, neurosurgeons have sometimes been disconcerted by the patient's developing hyperthermia,[1] or by a sudden outburst of ribald, maniacal behaviour.[2] The adiposo-genital syndrome of Fröhlich, sometimes idiopathic, is not infrequently the result of a hypothalamic lesion, and diabetes insipidus is a common symptom of disease in this region.

The relationship of the hypothalamus to the autonomic nervous system is well known. The effector mechanisms in the hypothalamus control the pulse and respiratory rates, the blood pressure, the temperature, the tone of the hollow viscera, and the general level of alertness of the individual. The hypothalamus, therefore, controls the *internal environment* of the body, and plays a crucial part in the physical responses with which a person reacts to changes in his surroundings.[3] (The thalamus, with its wide cortical connexions, is concerned more with stimuli arising in the external environment.) The hypothalamus, in addition, controls the physical reactions which accompany the various emotions.

### FRONTO-HYPOTHALAMIC CONNEXIONS

Recent investigation has revealed that the hypothalamus has direct connexions with the pre-frontal cerebral cortex. Le Gros Clark [4] has in fact suggested that the pre-frontal cortex is the projection area of the hypothalamus. There is thus a closer relationship between these widely contrasting cerebral levels than had been supposed. The primitive autonomic mechanisms which accompany instinctive reactions are now shown to be associated with neural activities taking place at the highest functional levels of the brain.

By the operation of lobotomy the frontal cortex is cut off from the thalamus and the hypothalamus, and with

1. Alpers, B. J. (1936): Arch. Neurol. Psychiat., **35**, 30.
2. Foerster, O. *Quoted by* Nielsen, J. M. (1946): *Clinical Neurology*, 2nd ed., revised. New York: Paul B. Hoeber, Inc.
3. Clark, W. E. Le Gros (1932): Brain, **55**, 406.
4. Clark, W. E. Le Gros (1948): Lancet, **1**, 353.

en met die onderbreking van die verbindende weefsels ondervind die pasient 'n vermindering van emosionele spanning; maar dit is aangemeld dat daar na die operasie 'n opvallende verandering in die bedrywigheid van die buislose kliere by sommige pasiënte opgemerk is.[5] Hierdie veranderinge van die buislose kliere kon veroorsaak gewees het deur die emosionele aanpassings wat uit die operasie voortgevloei het want die belangrikheid van sielkundige faktore by die beheer van die buislose kliere se afskeiding is in die afgelope tyd benadruk. Emosionele spanning het 'n onmiddellike uitwerking op die bynierkern; soos Cannon aangetoon het, veroorsaak vrees en ergenis 'n verhoogde afskeiding van adrenalien. Sielkundige faktore kan melkafskeiding, die menstruasieritme en vrugbaarheid aantas.

Die verandering van die buislose kliere wat op afsnyding van 'n breinlob volg, mag egter te wyte wees aan die versteuring van die verhouding tussen die skors en die hipothalamus.

### DIE HIPOTHALAMUS EN DIE BUISLOSE KLIERE

Daar kan min twyfel bestaan dat die meeste buislose kliere onder beheer van die senuweestelsel staan. Die agterste harsingslymklier en die bynierkern wat beide by ontwikkeling 'n buitengewone verband met die senuweestelsel het, is afhanklik van 'n regstreekse afskeidingmotoriese senuweevoorsiening.

Dit lyk nou of die hipothalamus noodsaaklik is vir die senuweebeheer van die hele reeks buislose kliere. Daar is besliste verbindings tussen die hipothalamus en die bynierkern; as die hipothalamus geprikkel word, word adrenalien onmiddellik in die bloedstroom vrygelaat.[6] Die senuweevoorsiening van die agterste harsingslymklier is deur middel van die tractus supra-optico-hypophysialis, wat vanaf die supra-optiese kern van die hipothalamus kom. Die voorste harsingslymklier het 'n buitengewoon karige senuweevoorraad en sy anatomiese verbinding met die senuweestelsel is lank reeds 'n belangrike endokrinologiese probleem. Die aanvaarbaarste moontlikheid wat geopper is,[7] is dat die voorste harsingslymklier (en dus onregstreeks die skildklier, die bynierskors en die geslagskliere) onder die senuweebeheer van die hipothalamus staan en senuwee-vaatprikkels deurgestuur word deur middel van die hipofise se poortbloedvate wat die hipothalamus met die voorste harsingslymklier verbind. Die hormone wat deur die buislose kliere vrygestel word, reageer op die senuweestelsel en het 'n aansienlike uitwerking op gedrag.

Die hipothalamus het dus in die lig van onlangse ondersoeke van die grootste betekenis geword. Deur sy verbinding met die frontale lob en die skynbaar noodsaaklike beheer wat hy oor die buislose kliere uitoefen, beheer die hipothalamus die spanning waaronder ons leef[8] en letsels daarvan en van sy verbindings tas die hele bouwerk aan van wat as persoonlikheid bestempel is.[9] Verdere ondersoeke wat nou aan die gang is, hou die belofte van gewigtige bydraes tot mediese kennis in.

5. Hemphill, R. E. (1944): Lancet, **2**, 345.
6. Magoun, H. W. *et al.* (1937): Amer. J. Physiol., **119**, 615.
7. Green, J. D. en Harris, G. W. (1947): J. Endocrinol., **5**, 136.
8. Partridge, M. (1950): *Prefrontal Leucotomy*. Oxford: *Blackwell Scientific Publications*.
9. Clark, W. E. le Gros en Meyer, M. (1950): Brit. Med. Bull., **6**, 1536.

the interruption of the fronto-thalamic fibres, the patient experiences a reduction of emotional tension; but it has been reported that following the operation a marked change in endocrine activity has been noted in some patients.[5] These endocrine changes may have been caused by the emotional adjustments resulting from the operation, for the importance of psychological factors in the control of endocrine secretion has lately been emphasized. Emotional stress has an immediate effect on the adrenal medulla; as Cannon has shown, fear and anger cause an increased discharge of adrenaline. Psychological factors can affect lactation, the menstrual rhythm and fertility.

The endocrine changes following lobotomy may, however, be due to interference with the frontal cortex-hypothalamus relationship.

### THE HYPOTHALAMUS AND THE ENDOCRINE GLANDS

There can be little doubt that the majority of endocrine glands are under control of the nervous system. The posterior pituitary gland and the adrenal medulla, which both have an exceptional association with the nervous system in development, depend on a direct secretomotor innervation.

It now appears that the hypothalamus is essential in the nervous control of the entire series of endocrine glands. The connexions between hypothalamus and adrenal medulla are definite: if the hypothalamus is stimulated, adrenaline is immediately released into the circulation.[6] The posterior pituitary gland is innervated by the supra-optico-hypophysial tract from the supraoptic nucleus of the hypothalamus. The anterior pituitary gland possesses a remarkably scanty nerve supply, and its anatomical connexion with the nervous system has long been a major endocrinological problem. The most acceptable suggestion[7] is that the anterior pituitary (and thus indirectly the thyroid, the adrenal cortex and the gonads) is under the neural control of the hypothalamus, neuro-vascular stimuli being transmitted by way of the hypophysial portal blood vessels which connect the hypothalamus to the anterior pituitary gland. The hormones liberated by the endocrine glands react on the nervous system, and have a considerable effect on behaviour.

The hypothalamus has, therefore, in the light of recent investigation, assumed a major significance. Connected with the frontal lobe and apparently exerting an essential control over the endocrine glands, the hypothalamus controls the tensions at which we live,[8] and interference with it and its connexions affects the very structure of what has been called personality.[9] Further study now in progress carries promise of momentous contributions to medical understanding.

5. Hemphill, R. E. (1944): Lancet, **2**, 345.
6. Magoun, H. W. *et al.* (1937): Amer. J. Physiol., **119**, 615.
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## NEW PREPARATIONS AND APPLIANCES

### 'ALTEPOSE'

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Obesity, the excess accumulation of fat in the subcutaneous cellular tissue, is nothing more than a verification of the law of the conservation of energy; if the caloric value of the food intake exceeds that required by the body for normal physiological function, the excess energy is transformed into fat.

Obesity is objectionable because, aside from aesthetic considerations, it predisposes to chronic illnesses, such as hypertension and hyperglycemia, and places an overload on heart and lungs. Statistics indicate obesity shortens the life span.

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| | |
|---|---|
| 'Propadrine' phenylpropanolamine hydrochloride | ¾ gr. |
| Thyroid | ¼ gr. |
| 'Delvinal' vinbarbital | ½ gr. |

'Propadrine' is a sympathomimetic drug which controls the hunger spasm but produces less central stimulation than either ephedrine or amphetamine, and fewer unpleasant side effects such as nervousness, insomnia, motor restlessness, and nausea are evidenced.

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'Altepose' is indicated in the dosage of one tablet two or three times a day, from one-half to one hour before mealtime, and a high protein, vegetable and fruit diet should be observed.

The dosage may be adjusted according to clinical judgment and in accordance with the age and condition of the patient.

Supplied in bottles of 100 tablets.

## ABSTRACTS

R. L. Brickhouse, M. H. Lepper, T. E. Stone and H. F. Dowling. *Treatment of Various Infections with Gantrisin.* Amer. J. Med. Sciences (1949): **218**, pp. 121-133.

Brickhouse and co-workers treated 142 patients with various infections, with Gantrisin (3, 4-dimethyl-5-sulphanilamidoisoxazole)—previously gantrosan—a new sulphonamide compound which is more soluble at various levels of pH than the sulphonamide compounds in general use. The drug is available in 0.5 gm. tablets for treatment by mouth and in 10 c.c. ampoules containing 1 gm. of the lithium salt for intravenous, subcutaneous or intramuscular administration. An initial dose of 6 gm. followed by 1 gm. every four hours was given for most infections. For urinary infections 2 gm. were given initially with 1 gm. every four hours thereafter. Comatose patients were given 6 gm. intravenously followed by 3 gm. by subcutaneous injection every eight hours until they could be given the usual oral dose. Children were given doses proportionate to their ages on the basis of 0.06 gm. per pound of body weight for each 24-hour period, half the 24-hour dose being given as the initial dose. One hundred and twenty patients recovered; treatment failed in 19, and three died. Therapeutic results in pneumococcic pneumonia, meningococcic meningitis and various urinary infections caused by gram-negative rods were similar to those observed with the use of sulphadiazine or sulphamerazine. Urinary complications were limited to gross hematuria in one patient. Crystals were observed in the urine of another patient. Dermatitis or fever attributed to the drug was observed in five patients. Nausea occurred in four patients and vomiting in none. The striking difference between this drug and the other sulphonamide compounds with the exception of sulphanilamide, is the infrequency of crystalluria and the almost complete absence of renal complications. Gantrisin is recommended for use when a sulphonamide compound is required in a patient in whom renal complications must be particularly guarded against.

G. Schaefer. *Pregnancy and Tuberculosis.* Amer. J. Obstet. and Gynecol. (1949): **58**, pp. 503-510.

Schaefer reports on 116 tuberculous pregnant women who were delivered at Sea View Hospital. Fluoroscopy and roentgenography used in antepartum examination revealed an incidence of tuberculosis complicating pregnancy of approximately 2%. Twenty-three of the 116 women died, giving a maternal mortality of 19.8%; 87% of the deaths occurred in the group with far-advanced tuberculosis. When tuberculosis is diagnosed during pregnancy the mortality is almost twice as high as when it is diagnosed before pregnancy; the mortality in the far-advanced group delivered by Caesarian section was 33.3%, whereas the mortality rate in the far-advanced group delivering spontaneously was 63.1%. Parity had no effect on pulmonary tuberculosis.

The important factor in prognosis for the pregnant woman is the extent and type of tuberculous lesions and the rapidity with which treatment can be instituted. Prolonged, severe labour is to be avoided in pulmonary tuberculosis. Pentobarbital sodium for analgesia and local anaesthesia has given good results in the author's cases. Caesarean section has a definite indication in selected cases.

None of the infants born showed evidence of pre-natal or post-natal tuberculosis. The infant mortality was 1.7%.

J. Thimann: *Conditioned Treatment of Alcoholism: Risks of its Application, its Rationale and Technique.* New Eng. J. Med. (1949): **241**, 368-370; 406-410.

The author discusses the rationale and technique of the conditioned reflex therapy of alcoholism which was begun at his hospital seven years ago. The treatments are given in the morning, because patients react better when fasting and rested. The preliminary medication consists of 10 to 20 mg. of amphetamine sulphate and 1 mg. of strychnine sulphate followed by a capsule containing 0.06 to 0.15 gm. of emetine hydrochloride with one to three glasses of tepid water. Simultaneously 0.05 to 0.15 gm. of emetine hydrochloride is administered hypodermically. These dosages are easily obtained from a 7.2% solution of emetine hydrochloride supplemented with 1% of pilocarpine hydrochloride and 4.8% ephedrine sulphate.

Immediately prior to the expected emesis the patients are exposed to the sight, smell and taste of the alcoholic beverages that they preferred when on a spell of drinking. The drinks are offered in undiluted form ('straight') and in the usual dilutions ('highballs'). These sessions last 20 to 30 minutes and are repeated daily for five or six days. They are followed by six or seven preventive one-day treatments so-called reinforcements, given at intervals ranging four to 12 weeks. Thus, the application of the initial series together with the reinforcements takes approximately a year. Some patients later request reinforcing treatments.

Experience is required to apply the treatment safely and efficiently. Caution is indicated because of the great range and variety of the patient's reaction to the conditioned and unconditioned stimuli, innumerable imponderable factors decisive for the success or failure of the treatment, and the narrow margin between underdosage and overdosage.

# SYPHILITIC COLD HAEMOGLOBINURIA

## REPORT OF A CASE WITH A BRIEF REVIEW OF THE DISEASE

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Macalister in 1908 and Mackenzie in 1929 reviewed fully the history of the disorder. Observed in 1794 by Charles Stewart, haemoglobinuria was first differentiated from haematuria by Dressler in 1854. In 1866 Pavy split off malarial haemoglobinuria as a clinical entity.

Dr. Druitt, a sufferer, in 1875 attracted the attention of passers-by during attacks, not by his haemoglobinuria but by extreme cyanosis of the extremities, face, nose and ears. Vasomotor disturbances, giant urticaria and tingling sensations were also noted by Lichtheim in 1876, who assumed that the dark urine was due to haemoglobinuria and noted chilling as a factor in its production; he postulated that intravascular haemolysis and haemoglobinaemia occurred. Kussner in 1879 proved that Lichtheim's concept of intravascular haemolysis was correct.

Rosenbach in 1880 produced haemoglobinuria in a patient by dipping the feet in ice-cold water for 10 minutes, and Ehrlich in 1881 immersed a single finger in iced water and showed that haemoglobinaemia occurred locally in that finger rather than in the vascular bed as a whole.

In 1885 Muir drew attention to syphilis as a factor and pointed out that 15 of the 36 cases in the literature were in patients unquestionably syphilitic. The discovery of the Wassermann reaction in 1906 enabled a more accurate diagnosis to be made and confirmed that the majority of cases were of syphilitic origin. In a large proportion of cases the syphilis has been congenital.

Donath and Landsteiner in 1904 described the reaction bearing their names which is positive in cases of syphilitic paroxysmal cold haemoglobinuria.

Here the matter rested until 1935, when Salen distinguished between luetic and non-luetic cases, and in 1943 Stats and Wasserman demonstrated the part played by cold agglutinins in the non-luetic cases.

### PATHOLOGY

The earlier writers demonstrated that the haemoglobinuria follows haemoglobinaemia, due to local intravascular haemolysis, in response to cold acting with a circulating haemolysin. Haemoglobinuria occurs when the concentration of haemoglobin in the blood exceeds the renal threshhold of about 150 mg. per 100 ml. of blood. In the average man the sudden lysis of 25-50 ml. of blood is sufficient to produce haemoglobinuria.

In the syphilitic cases the Donath-Landsteiner reaction is positive (Donath and Landsteiner, 1904, modified by Mackenzie, 1929), but not in those due to cold agglutination with haemolysis. In this *in vitro* test the blood of the patient if cooled and afterwards warmed exhibits haemolysis. The haemolysin is thermolabile and complement is essential for the cold phase during which the haemolysin is adsorbed to the red cells.

If the cold phase extends beyond seven minutes the amount of haemolysis is decreased (Yorke and MacFie, 1921). The reaction will also occur if the patient's serum be mixed with other human red cells of the same blood group, and complement is again necessary.

Wagley *et al.* (1947) found that saturation of a patient's blood with carbon dioxide produced haemolysis, which was not dependent on a change in the pH of the blood as in nocturnal haemoglobinuria. They also found that when cyanide or sulphanilamide was added to the blood the Donath-Landsteiner reaction was inhibited. This was confirmed by Siebens (1948), and he too noted that union of haemolysin with the red cell was not prevented.

In non-syphilitic cases the Donath-Landsteiner reaction is negative and there is a high titre of cold agglutinins, haemolysis takes place with chilling and shaking in the absence of complement (Stats, 1945) and the haemolysin is thermostable. A titre of cold agglutinins over 1 : 3,000 was considered necessary for haemolysis, though that is not a critical level, as the titre may be higher without haemolysis occurring. In Malley's (1949) case the titre was 1 : 2,048 repeatedly. If not shaken in the test tube, haemolysis did not occur. Cold agglutination in the absence of haemolysis is reversible on warming.

Whether the haemolysin of syphilitic cases is identical with the dermolysin causing the vasomotor reactions is not clear. Harris *et al.* (1927) lean to the view that they are separate and on occasions were able to sensitize the skin of other patients by injections of serum from patients with cold haemoglobinuria. But of necessity they were compelled to use other syphilitic patients as subjects for their experiments. Stats and Wasserman (1943) suggest that these reactions are allergic.

It appears certain that the haemolysin is distinct from the reagin responsible for the Wassermann reaction (Mackenzie, 1929).

### CLINICAL FEATURES

These may combine any of the features of intermittent haemolysis, vasomotor changes and in syphilitic cases the stigmata of that disease.

An attack may be heralded by aching pains in the back, legs and abdomen, by abdominal cramps, and by headache, malaise and usually shivering. The interval between chilling, which may be slight, and the beginning of symptoms may be from a few minutes to seven or eight hours. The first specimen of urine is dark, but returns to normal in 24 hours or less.

Typical symptoms may occur with albuminuria but without haemoglobinuria, and haemoglobinuria may occur without symptoms. During attacks there may be enlargement of the liver and spleen, with slight jaundice.

An attack may be accompanied by urticaria, Raynaud's phenomenon or angioneurotic oedema. Stats and Bullowa

(1943) reported a case with gangrene of the extremities and a cold agglutinin titre ranging from 1:3,000 to 1:32,000.

Following a haemolytic crisis, the blood shows a reticulocyte response, and where attacks have been repeated, a hypochromic anaemia with a very active bone marrow will be found. The white cells after such a crisis show a leucocytosis with polymorphonuclear preponderance, and return to normal thereafter.

## CASE REPORT

The patient, a Coloured boy aged six years, was admitted to the Paediatric Department of the Groote Schuur Hospital on 24 September 1950 with the complaint that a chair had fallen on his abdomen two years previously, since when he had intermittently passed dark red or brown urine. On direct questioning these attacks were said to be more frequent during the winter months.

At the onset of these attacks he complained of lower abdominal pain and shivering, but no pain had been experienced in the back and loins. No vomiting occurred.

He had been previously investigated for the cause of this dark urine, which contained no red cells, and intravenous and retrograde pyelography had revealed no abnormality.

Recently his mother noticed that he was becoming pale.

There was no story of skin rashes or swellings associated with the attacks.

*Previous History.* He had thrived without serious illness and his milestones were normal.

*Family History.* His mother, twice married, has 10 children, eight by her first husband and two by her second, the youngest being this patient. She had had no miscarriages.

*On Examination.* The boy was very pale and the bridge of his nose was depressed. There was no jaundice. His teeth were of the first dentition and were grossly carious. His weight was 40 lb.

Palpation of the abdomen revealed a liver enlarged to two fingers' breadth below the costal margin in the anterior axillary line, of firm consistency with an even edge. Before admission the enlargement had been to three fingers below the costal margin. The spleen was just palpable at rest and was also firm. There was no abnormal glandular enlargement.

At the helices of the ears were symmetrical puckered areas 1 cm. round, which could not be identified as scars and might have been of congenital origin.

Both ear drums were scarred. All the other systems were normal.

*Investigations.* The urine on admission contained an excess of urobilin visible spectroscopically, and the Schlesinger test was strongly positive. A trace of albumin, a few granular casts and renal epithelial cells were seen microscopically. There was no haemoglobin or excess of red blood cells.

Examination of the blood showed that there were 3,410,000 red cells per c.mm. The haemoglobin concentration was 9.0 gm. per 100 ml. of blood, and the packed cell volume 28%. There was a reticulocytosis of 10%.

The bone marrow was extremely reactive.

The red cell fragility curve was normal.

The serum van den Bergh reactions, direct and indirect, were negative.

The icterus index was 3.5 (normal < 5). The empirical liver function tests (thymol turbidity, colloidal gold and thymol flocculation) were normal.

Cold agglutinins were positive at a titre of 1:25, which is not significant.

An attempt was made (Table I) to investigate the last child of the first husband as well as the patient's sib, but this has not been possible.

*Progress.* During the first week urobilin, but no haemoglobin, was constantly observed in the urine.

Seven days after admission the boy's hands and feet were simultaneously immersed in ice-cold water for one minute. A specimen of urine taken immediately before the test showed urobilin but no haemoglobin and the Schlesinger test was positive.

The next specimen passed two hours later was dark red and contained a large amount of urobilin, oxyhaemoglobin and methaemoglobin.

Attempts were made during the next few days to demonstrate that haemolysis occurred locally in the left hand following chilling but this was not demonstrated. This was attributed to technical failure, but no haemoglobinuria resulted.

Following the work of Wagley (1947) 1 gm. sulphanilamide was given by mouth one hour before the test in an attempt to simulate their *in vitro* experiment that cyanide and sulphanilamide inhibited the Donath-Landsteiner reaction. No haemolysis was obtained, but a repetition on the next day without sulphanilamide also produced no haemolysis or haemoglobinuria.

It had now become clear that the disease had entered a refractory phase, possibly owing to the exhaustion of complement, as noted by Yorke and MacFie (1921), and in that state he remained until discharge two months after admission.

Five weeks after admission the haemoglobin was 8.8 gm. per 100 ml. of blood and the red cells 3,120,000 per c.mm.

On discharge his haemoglobin had risen to 10.5 gm. per 100 ml. and the red cells to 4,050,000 per c.mm. The reticulocytosis of 10% which had been observed initially fell away and the reticulocyte count fluctuated between 0.4% and 2.2% for the rest of his stay.

The liver became normal in size and its consistency softer. The spleen disappeared under the costal margin.

## DIFFERENTIAL DIAGNOSIS OF HAEMOGLOBINURIA

There are many varieties of paroxysmal haemoglobinuria, and the essential serological differences are set out in Table II.

Clinically the majority may be told apart by the history. If the disease is paroxysmal and is associated with chilling,

TABLE I

| *Relationship* | *Age* | *Sex* | *Blood Group (Rho or D)* | *Wassermann Reaction* | *Kahn* | *Berger* | *Coombs Test* | *Donath-Landsteiner* |
|---|---|---|---|---|---|---|---|---|
| Mother .. .. .. .. | 39 | F | Present | — | Not done | — | Negative | Negative |
| Sib .. .. .. .. | 8 | F | Present | + | Not done | + | Doubtful | Negative |
| Patient .. .. .. .. | 5 | M | Present | anti-complementary | + + + + | + | Positive | Positive |

X-rays of the chest and skeleton revealed no abnormality.

TABLE II—SEROLOGICAL REACTIONS IN PAROXYSMAL HAEMOGLOBINURIA

| *Type* | *Wassermann Reaction* | *Donath-Landsteiner Reaction* | *Acid Haemolysis (blood pH 6-8)* | *Cold Agglutinins* | *Myohaemoglobin Spectrum* |
|---|---|---|---|---|---|
| Cold (luetic) .. .. .. .. | Positive | Positive | Negative | Negative | Negative |
| Cold (non-luetic) .. .. .. | Negative | Negative | Negative | Positive (titre 1: 3,000 or more) | |
| Nocturnal (Marchiafava-Micheli) .. | Negative | Negative | Positive | Negative | Negative |
| Favism 'March' (exercise) haemoglobinuria .. .. .. | | | All negative | | |

then one of the cold haemoglobinurias is suggested, and stigmata of syphilis may serve to distinguish that type from the one with a high titre of cold agglutinins. If occurring by night and absent by day, then it will be of the Marchiafava-Micheli type, and in the intervals between paroxysms there is haemosiderinuria due to continuous low-grade haemolysis. If associated with exercise then it is termed 'march' haemoglobinuria.

Favism follows exposure to broad-beans in sensitive people either by ingestion or by walking through the fields in which they grow.

If malarial, the parasites will be found in the blood in large numbers. A recent blood transfusion will suggest an incompatible reaction. Acute haemolytic anaemia of the Lederer type may be ushered in by haemoglobinuria which ceases in 24 hours.

Myohaemoglobinuria follows crush injuries and rarely occurs spontaneously; the urine will show the spectrum of myohaemoglobin.

As an industrial hazard haemoglobinuria may be found following poisoning by substances such as arsenious trioxide.

*Prognosis.* Becker (1948) found that the results of anti-syphilitic therapy were very difficult to assess. It is certain that immediate cure does not follow in all cases, but that there is immediate improvement in the majority. In this it is comparable to the slow reversal of the Wassermann reaction after treatment.

The natural history of the disease can be long, 20 years or more, and it is not fatal. Peripheral gangrene may provide a further disability (Stats and Bullowa, 1948), but the case of renal insufficiency and death reported by Sussman and Kaylen (1948) cannot be finally ascribed to the haemoglobinuria.

*Discussion.* The case presented here shows all the features of syphilitic paroxysmal haemoglobinuria; the positive Wassermann and Donath-Landsteiner reactions; the haemoglobinuria, anaemia and reticulocytosis and the enlarged liver and spleen following haemolysis. The depressed bridge of the nose suggested congenital syphilis.

Of interest is the positive Coomb's test, which is non-specific and only proves the presence of a circulating haemolysin. Although two other members of the family were syphilitic, neither they nor other members suffered from haemoglobinuria. But the sib's Coombs' test was doubtfully positive though her Donath-Landsteiner test was negative. Haemolysins have previously been demonstrated in the blood of syphilitic patients who do not have episodes of haemoglobinuria. Families have been reported with more than one member affected with the disease.

No evidence of vasomotor instability was found, and the marks on the ears could not be proved to be healed chilblains nor the result of peripheral vasoconstriction.

In the early stages excess urobilin was constantly found in the urine even though no haemolytic crisis had occurred and the patient was warm in bed. It is probable that despite the normal liver function tests the liver was disordered, which may account for this fact. The liver was certainly abnormally firm.

SUMMARY

1. A case of cold haemoglobinuria with congenital syphilis is presented.

2. The history, features and diagnosis of the complaint are discussed.

I wish to thank Dr. Wolf Rabkin, under whose care the patient was, for advice and criticism and for allowing me to publish this case. The laboratory investigations were done in Professor van den Ende's department to whom I am grateful. The case was discussed with Dr. H. Clegg and Dr. A. Kipps who gave valuable advice. Dr. Budtz Olsen examined the bone marrow and constructed the red-cell fragility curve.

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# VOLVULUS

## A REVIEW OF TWENTY-SEVEN CASES

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*Incidence.* Intestinal torsion is a not uncommon condition, though its incidence varies in different parts of the world. In Eastern Europe an incidence of a third or more of some series of acute intestinal occlusions has been observed, while in the United Kingdom, on the other hand, Porrit (1950) places the incidence at no more than 2-5%. In the U.S.A. Wangensteen (1945) remarks on an incidence of about 10% of acute intestinal obstructions. Amongst Africans volvulus is quite common (Kerr and Kirkaldy-Willis, 1946; Gelfand, 1947; Hamman, 1950; Dickson, 1950.

The cases reported here were amongst 150 proved acute intestinal occlusions admitted to the Coronation Non-European Hospital, Johannesburg. The incidence was 18%.

*Etiology.* Of our cases, 18 involved the small bowel alone, two involved both small bowel and the sigmoid loop, five the sigmoid alone, and two were ileocaecal.

(a) *Small Bowel.* The small bowel is the commonest site of torsion (67% of cases—Sweet, cited by Wangensteen, 1945). In view of the frequency with which the small bowel is involved in adhesive processes, and the mobility and redundancy of its lower loops, the incidence of torsion here may be readily understood.

In our series pelvic adhesions in females was the commonest single source of torsion, while adhesions generally accounted for 10 (55.6%) of our 18 cases.

In three cases torsion followed an internal herniation, and in another three patients the volvulus was idiopathic. (Idiopathic small bowel torsion is not rare amongst the Bantu.) In two cases, one of whom was an adult, the torsion was associated with gross errors of rotation and fixation of the mid-gut (Dott, 1927).

In the Bantu, diet and parasitic infestation of the bowel would appear to play a part in promoting a volvulus.

(b) *Sigmoid Colon.* The sigmoid loop is the next commonest site of torsion, and the commonest site for colonic volvulus (65%—Bruusgaard, 1947). The condition may be idiopathic, but amongst Europeans as a rule the predisposing factor is an abnormal redundancy of the loop, this redundancy being usually associated with chronic constipation, in middle-aged males (Hinton and Steiner, 1942; Essenson and Ginzberg, 1949; Griffin *et al.*, 1945; Aird, 1949).

Persistence of a foetal elongation of the sigmoid (Essenson and Ginzberg, 1945), or sigmoid megacolon (Weeks, 1931), may also predispose towards a torsion. Adhesions have been cited as a factor in relation to sigmoid volvulus, though this is not my own impression. I have commonly found the sigmoid colon to be partly obstructed by adhesions of inflammatory origin, but have never had to deal with a sigmoid torsion related to this cause, while inflammatory conditions of the sigmoid colon tend to result in fixation of the loop. Adhesions may, however, be a cause of recurrent sigmoid volvulus.

In our seven cases, no cause other than a redundant sigmoid loop was found. The exciting factor is usually some physical effort such as straining at stool.

(c) *Ileo-Caecal Torsion.* Acute torsion of the caecum is an uncommon condition, the first case description being credited to Rokitansky (1841) by Dixon and Meyer (1948). The essential predisposing factor is a congenital fault in rotation or fixation of the mid-gut allowing of undue redundancy and mobility of the caecum. Minor degrees of torsion, however, are probably not uncommon. Wolfer *et al.* (1942), have found that a study of adult cadavers reveals the fact that in 11.2% of cases the caecum is capable of torsion, while Porrit (1950), remarks that 15-25% of normal persons possess a freely swinging right colon. I have found a minor degree of torsion of the caecum to be the probable cause of symptoms attributed to chronic appendicitis on a number of occasions.

We had only two cases of acute torsion in our series. The exciting factors are usually some form of stress. The condition has been noted in pregnancy (Donald, 1927), during labour (Basden, 1934), and as a post-operative complication (Dixon and Miller, 1940).

*Sex and Age Incidence.* Males tend to predominate in most series of sigmoid torsion, and of our seven patients five were males. Of our 18 small bowel volvuli, however, 12 occurred in female patients.

Ages given by Bantu patients are unreliable, but it would appear that the majority of our patients were between 30 and 40. Gelfand (1947) comments on the incidence of volvulus amongst Africans at a somewhat younger age.

*Pathology.* This is essentially that of internal strangulation generally, the features of which have been dealt with in a previous paper (Hamman, 1950). Volvuli are, however, a particularly lethal form of strangulation, vascular occlusion being a common event. The segments of gut involved tend to be long, and shock becomes an important factor. In this series, in all instances, at least a foot of gut was involved, while in 13 cases the segment was two feet or more. In seven cases three feet or more of bowel were involved. The closed loop distension compromises the circulation in the wall of the gut, while the involvement in most cases of a generous segment of related mesentery constitutes a threat to the blood supply of the entire loop. Of our patients, in 11 cases gangrene was present, while in another nine cases there was a severe degree of congestion. Thus in 20 (74.7%) vascular insufficiency was present. In this connexion, torsion in the newborn (*volvulus neonatorum*—Dott, 1927) is an exception. Since the gut is relatively sterile at this stage, and the distal limb usually only partly occluded (Aird, 1949), actual strangulation in infantile volvulus is uncommon, but can occur (Charsley, 1928). In our infantile case there was no vascular interference, but in our adult

patient with a small bowel volvulus due to failure of normal rotation of the mid-gut, the entire small gut was gangrenous. In sigmoid volvuli, distension of the loop in itself has lead to as much of the mortality as necrosis and peritonitis. In connexion with small gut torsions, in our cases, gangrene with toxaemia and shock was the most prominent lethal pattern. Gangrene was present in nine of 16 fatal cases included in this series, while in four of the remaining seven deaths, a fatal outcome was due to incidental disease.

### CLINICAL FEATURES

(a) *Shock*. This is a definite feature, and where long loops are concerned may prove irreversible by the time the patient is seen. It is important to appreciate that:

1. Shock may not be clinically evident at the time when the patient's circulating blood volume has been reduced by as much as 25%;

2. Shock is very often noted as a clinical symptom only after serious vascular insufficiency has been established.

Shock was prominent in the series reported by Evans and Bigger (1947), the mortality rate in their series being high. In our cases, shock was noted on admission in only nine (33.3%). In eight of these nine patients, however, gangrene was present. On the other hand, shock was not observed in two patients with gangrene of at least one foot of gut. Thus, in 16 patients subjected to torsion but without gut infarction, shock was detected in only one, and in this patient there was a severe degree of congestion. I would stress that I am referring to shock here as a clinical rather than a pathological entity.

These findings, which conform by and large to observations one has made in connexion with other forms of strangulation, are of some importance. Shock is evidence of established strangulation rather than of torsion *per se*. By the time shock becomes evident, irreversible changes may be present.

(b) *Tachycardia*. A fast pulse may be expected, but this again is not the rule, and is more likely to be evident subsequent to vascular disturbances in the loop. However, I have noted a pulse rate of below 100 per minute, even though gangrene has been established. Evans and Bigger (1947) also remark on this fact, the pulse rate being below 100 in a number of their fatal cases. A tachycardia was found in 12 (less than 50%) of our total series.

(c) *Pain*. This was the most constant and prominent single symptom in our cases, being present in one form or other in all (100%). Pain may present as a typical colic following the luminal occlusion, or as a severe pain, often of sudden onset, which may vary in intensity but does not remit, this severe continuous pain being associated with vascular interference in the wall of the gut. Continuous pain may also result from torsion of the mesentery, and from irritation of the parietal peritoneum by the sanguineous exudation that follows vascular insufficiency of a serious degree. Intermittent colic was noted in 15 (55.6%) of our cases. As a subjective symptom, colic is a variable feature. Reasons for this are the fact that colic may have been present but not admitted to in the history, while, as remarked on by Mc'Kittrick and Sarris (1940), after 12 hours the pain of intestinal colic related to obstruction may become general and continuous. Typical colic was prominent in sigmoid volvulus, but less so in small bowel torsion where acute continuous pain was often the first symptom. In cases of sigmoid torsion of a recurrent nature, pain following distension may be slight prior to the onset of vascular interference. Severe pain of a continuous nature was observed in 14 (51.85%) of our cases, being associated with vascular insufficiency in all.

(d) *Vomiting*. Vomiting is a common but variable symptom. The vomiting in strangulated lesions has two components (Crowly and Winfield, 1949). The first is reflex associated with the stimulation of afferent nerves, and, as shown by the initial vomiting, is common in connexion with torsion. The second component is related to proximal stasis and distension and is repeated as a rule. With early and severe strangulation there may on occasion be a constant retching. Blood may be noted in the vomit on occasion. It is a fact, however, that vomiting may not be a feature despite the presence of a torsion. Vomiting, initial only, or occurring only after taking fluids by mouth in most cases, was observed in 18 (66.7%) of our series. Blood in the vomit was found in two cases of gut infarction.

(e) *Distension*. In simple occlusions and in strangulation due to ensnaring by bands, or mesenteric vascular accidents, distension may be a late sign and should not be waited for before coming to a diagnosis. In torsions, however, the presence of a closed loop plus the high incidence of early vascular embarrassment, leads to rapid distension of the loop which shows itself as a localized rather than a general distension; though where the sigmoid loop is concerned, the distension may be, and often is, enormous. A small bowel torsion, however, may not lead to obvious abdominal distension, though the distended loop may be palpated as a tumour mass, or felt on rectal or vaginal examination. As remarked on by Hendricks and Griffin (1947), distension may be more real than apparent in intestinal occlusion. Marked distension was present in 15 (55.6%) of our cases, of which seven were sigmoid torsions. A tumour mass, felt on abdominal examination or per rectum or per vaginum, was found in 10 (37.3%) of cases. Where strangulation is rapid, the infiltrated gut is not always capable of becoming distended. In our torsion involving 18 feet of small gut, there was only slight abdominal distension on inspection, the gut being gangrenous.

(f) *Constipation*. Absolute constipation is an early feature of sigmoid torsion, but an unreliable symptom where caecal and small bowel torsions are concerned. Absolute constipation was found in only 12 (less than 50%) of our cases on admission.

(g) *Signs of Peritoneal Irritation*. Such signs are: abdominal wall tenderness, rebound pain, guarding and actual rigidity, being associated, as a rule, with severe congestion, gangrene or perforation of the loop. Evidence of peritoneal irritation was found in 18 (67.7%) of our cases, being associated with gangrene in 10 cases, and severe congestion in seven cases. In only one patient with a torsion but as yet no vascular interference, were signs found, and in this patient there was an incidental active pelvic peritonitis.

(h) *Peristaltic Sounds*. Repeated auscultation remains a neglected clinical investigation. Active peristaltic sounds

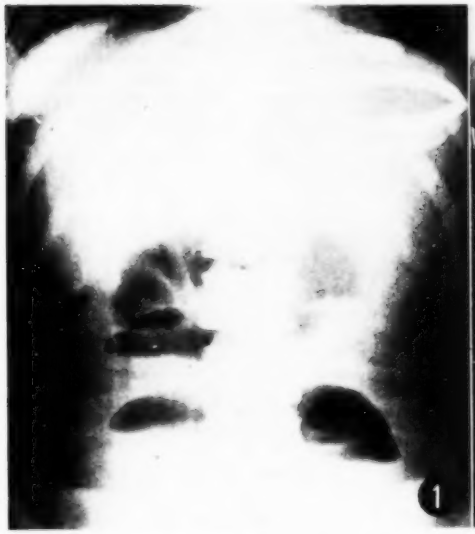

*Fig. 1.* Small bowel volvulus. Disproportionate distension.

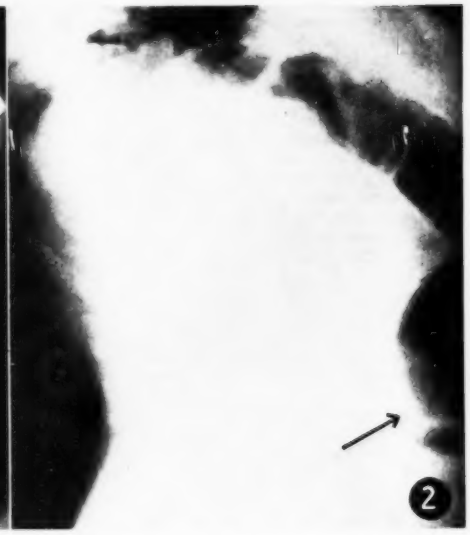

*Fig. 2.* Small bowel volvulus showing inverted U with fluid level at the base.

were present in most of our cases, with at times, high pitched rushes over the loop involved. Absent sounds did not necessarily indicate gangrene of the loop.

THE DIAGNOSIS

1. *Small Bowel Torsions*: (a) *From Simple Occlusions.* Particular importance has been attached to shock, and the signs of peritoneal irritation in diagnosing a strangulation as opposed to a simple occlusion, and torsions are essentially strangulating lesions. However, shock, peritoneal irritation (Wangensteen, 1945), rebound tenderness (Aird, 1949), and bloody fluid on abdominal paracentesis (Hill *et al.*, 1942) are found usually at a time when gangrene, if not already present, is imminent, and the prognosis in such patients is not good. Further, Wangensteen remarks that the signs of peritoneal irritation may come on 'tardily'. The essence of the problem is to suspect a torsion prior to local vascular insufficiency. In our series it will be noted that only one patient without vascular insufficiency of a serious degree presented with such signs. Earlier evidences of torsion, unfortunately not always detectable, are as follows:

i. Disproportionate distension or the palpation of a mass, relatively early in the course of a patient presenting with evidence of occlusion.

ii. Failure to get relief of pain after two hours' efficient gastro-duodenal suction drainage (Aird, 1949).

iii. X-ray evidences. X-ray findings are not necessarily helpful in diagnosing between a simple occlusion and a small bowel volvulus, but may be of value. Disproportionate distension or visualisation of the loop as an inverted U with a fluid level at its base are most suggestive. Fig. 1 shows disproportionate distension in a patient with a small bowel volvulus, while Fig. 2 shows the inverted U in another patient.

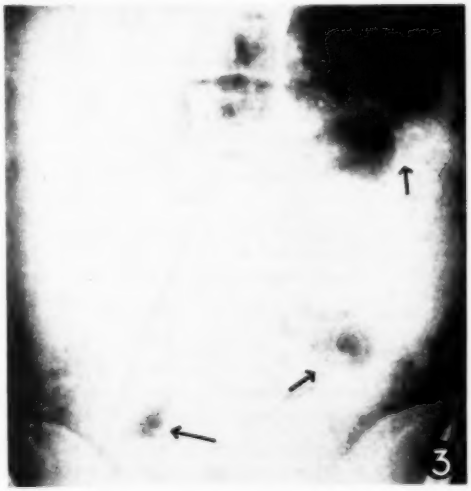

*Fig. 3.* Small bowel stasis with distended loop and fluid levels found in a case of acute pancreatitis.

(b) *From Ruptured Ectopic Pregnancy.* At least three of our female torsions were diagnosed as such. Reasons for error were: the signs of shock, blood loss, peritoneal irritation, the palpation of a tender mass (gangrenous gut) in the pelvis, and in two patients associated vaginal bleeding.

(c) *From Other Acute Abdominal Conditions.* A number of conditions may stimulate an acute torsion. Twice in two weeks I opened an acute pancreatitis under the mistaken diagnosis of a gut strangulation. Both patients gave a history of colic, followed by continuous abdominal pain, and presented with shock, abdominal tenderness, guarding and leucocytosis; on X-ray there was evidence of small gut stasis. The X-ray plate of one patient is shown (Fig. 3).

2. *Sigmoid Torsion.* Here the diagnosis is far more readily made. A previous history, present in about 50% of European patients (often unobtainable in the African) together with the early and gross colonic distension, and absolute constipation, suggests the diagnosis in most cases. Pain need not be prominent in the early stages. Where doubt exists, a straight X-ray is often diagnostic, and can be further confirmed by the tap water enema test or barium enema. The principal differentiation is between a sigmoid volvulus and a colonic closed loop due to an obstructing carcinoma. This is of importance since a proximal colostomy performed under the mistaken diagnosis of an obstructing carcinoma will do nothing to relieve the torsion, and invites a fatal outcome. This error is reported in the literature. The X-ray appearances, tap water or barium enema and the history should serve to differentiate.

## THE PROGNOSIS

The prognosis in relation to volvulus has been, and remains, a serious one, this being largely due to the high incidence of vascular occlusion. The mortality from sigmoid volvulus would appear to be not less than 24% and often in the region of 50%, being higher if resection has to be carried out, e.g. Hinton and Steiner (1942) cite a mortality of 30-45%, Aird (1949) 50%, and Weeks (1931) 24.5%, while Porrit mentions a lethal rate of 80% if resection has to be carried out.

We had two deaths out of seven sigmoid torsions, two of whom were subjected to a stage of resection, one of whom died two weeks after resection from bilateral pneumonia.

The outlook for caecal torsion is also grave. Porrit (1950) cites a death rate of 45% where the gut is viable, and 65% where resection is necessary. Similar figures are mentioned by Dixon and Meyer (1948), in terms of reviews dating back some time. In relation to small bowel torsions, Porrit (1950) cites a mortality of 65% following resection.

In relation to sigmoid and caecal torsion, distension has been as lethal as devascularization and necrosis, while in terms of the small bowel, distension in my experience is less lethal than the risk of gangrene.

Our total mortality for 27 cases of torsion was 16 or 59.3%. Of these, 12 deaths followed surgery, an operative mortality rate of 50%. Two patients died some time after surgery from incidental disease, giving a true operative mortality of 43.5%. Of nine patients who had gut resected, only three survived, of whom two died some time later from incidental disease. Of the 16 deaths, one patient died of bilateral pneumonia two weeks after resection, one died of chronic nephritis after simple de-torsion of a small bowel volvulus. Another patient died about eight weeks after de-torsion of a volvulus from an amoebic liver abscess, and another died of bilateral advanced pulmonary tuberculosis. One patient died from post-operative haemorrhage, and another patient suffering from a sigmoid volvulus died from distension. Of the remaining 10 deaths, all but one followed gangrene of the gut. No small bowel volvuli died from distension, and the outlook for small bowel torsion in the absence of vascular changes would appear to be good if surgery is undertaken.

## SUMMARY

1. Twenty-seven cases of intestinal torsion are reviewed.

2. Attention is drawn to the high rate of vascular insufficiency within the loops involved, 74.7% of the cases reviewed being subjected to gangrene or severe congestion.

3. The salient clinical features are commented on with particular reference to the fact that the classical signs of strangulation become evident at a time when the prognosis is already grave.

4. The continued high mortality related to volvulus is commented on.

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## PASSING EVENTS

We deeply regret to record the death of Dr. A. Albers as the result of a mountaineering accident on Table Mountain on 24 March 1951.

* * * *

Dr. R. P. Schach, F.R.C.S. (Edin.), F.R.F.P.S. (Glas.), of Johannesburg, sailed on 16 March 1951 for the United States, where he will do post-graduate work in urology.

* * * *

Dr. and Mrs. C. A. R. Schulenburg have returned from a visit to London, New York and Boston. Dr. Schulenburg visited surgical clinics in these places and in London he gave a Hunterian Lecture at the Royal College of Surgeons. His address dealt with Adamantinoma. Dr. Schulenburg also lectured at Guy's Hospital.

### SANTA

The Second National Conference of the South African National Tuberculosis Association will be held in Cape Town from 9–11 May 1951 at the Muizenberg Pavilion.

Further particulars may be obtained from the Secretary, S.A.N.T.A., Empire Building, Commissioner Street, Johannesburg.

* * * *

Messrs. Vitamins Limited are always pleased to meet members of the medical profession visiting England from overseas, and are glad to arrange visits to their Research Department. Messrs. Vitamins Limited are planning to make a special effort to entertain those members of the medical profession visiting England during the Festival of Britain and, wherever possible, would like to show them over the work being carried out at their Research Station.

Any members of the medical profession in South Africa who are proceeding overseas, either in the near future, or at some later date, should contact the Durban branch of Fassett and Johnson Limited, who will be only too happy to provide them with suitable letters of introduction.

### NUFFIELD DOMINION TRAVELLING FELLOWSHIPS

1. Applications are invited *not later than 14 May 1951* for the following very generous senior fellowships offered to South African nationals by the Nuffield Foundation for the year 1952:

One fellowship in the Natural Sciences.
One fellowship in the Humanities.
Two fellowships in Medicine.

2. Applicants must be between 25 and 35 years of age, have high intellectual and personal qualities, and have shown capacity of an unusual order to advance knowledge and education in some branch of their fields. They must undertake to return to South Africa as soon as possible after the termination of their fellowships.

3. Copies of the regulations and application forms should be obtained:—

(a) *By university applicants*—from the Registrars of their universities;

(b) *By others*—from the Honorary Secretary, Nuffield Foundation South African Liaison Committee, P.O. Box 395, Pretoria.

4. *Applications received after 14 May 1951 will not be considered until 1952.*

### EMPIRE MEDICAL ADVISORY BUREAU

South African medical practitioners who are thinking of visiting the United Kingdom should get into touch with Dr. H. A. Sandiford, Medical Director of the Bureau, at B.M.A. House, Tavistock Square, London, W.C.1, so that all the facilities of the Bureau will be placed at their disposal.

Medical practitioners will find the Bureau helpful in arranging accommodation as well as post-graduate courses of study.

## ASSOCIATION NEWS : VERENIGINGSNUUS

### DR. KARL BREMER—MINISTER OF HEALTH

The following exchange of correspondence is published for the information of members.

*Letter from Dr. A. W. S. Sichel, President of the Medical Association, to Senator the Honorable Dr. K. Bremer, Minister of Health*:—

Dear Dr. Bremer: On behalf of the Medical Association of South Africa I congratulate you on your appointment as Minister of Health and Social Welfare and wish you all success during your tenure of office.

I am sure all our members will be delighted to know that a colleague has been appointed to this very important portfolio and will feel that, in view of your great experience and long years of service to the country and the medical profession, the weighty problems that confront you will be handled ably and determinedly.

You will commence your labours with the knowledge that we have great confidence in you and your ability, and we trust that the cordial co-operation that existed between your immediate predecessors and our Association will continue.

I take this opportunity of adding the personal congratulations of my wife and myself.

Yours sincerely,
A. W. S. Sichel,
*President.*

12 February 1951.

*Letter from Senator the Honorable Dr. K. Bremer, Minister of Health, to Dr. A. W. S. Sichel, President of the Medical Association of South Africa*:—

Dear Dr. Sichel: I was pleased to receive your letter and should be grateful if you would convey my thanks to your Association for their kind message of congratulation. I appreciate it very much indeed.

With kind regards to your wife and yourself,

Yours sincerely,
Karl Bremer.

16 March 1951.

### THE STATUS OF THE GENERAL PRACTITIONER

ABSTRACT FROM A DEBATE AT A MEETING OF THE NATAL COASTAL BRANCH ON 15 MARCH 1951

A full and frank discussion took place on the present status of the general practitioner in South Africa. The President, Dr. A. Broomberg, in opening the debate in his capacity as Chairman of the General Practitioners' Group of the Branch, submitted the following memorandum to the meeting as a basis for discussion.

"At a meeting of General Practitioners of this Branch, held on 24 January this year, the status of the G.P. in South Africa was discussed with special reference to an article on the subject which appeared in a recent issue of the *Journal*. This article by Professor Brock followed a debate in Federal Council on a problem which was causing a great deal of perturbation all over the English-speaking world.

It is generally admitted that in recent years there has been a very marked decline in the status of the G.P. The old type of family doctor has, to all intents and purposes, disappeared except perhaps in the country towns and areas where there were no Specialists in practice and where the doctor has of necessity to carry on the practice of medicine to the best of his ability and with the facilities which are available to him.

In the cities the G.P. is becoming very little more than an inferior type of doctor who serves as an agent for the introduction of a patient to a varying number of Specialists. In many instances he does not even serve in this capacity, since the patient finds that he has already an easy access to the Specialist who, besides consultation, also undertakes treatment without feeling in any way bound to refer that patient back to his G.P. This latter is not by any means an exceptional state of affairs.

The public naturally wishes to have the best medical attention, which, in its view, is only to be obtained from the Specialist; and, since there is no difficulty in gaining direct access to the Specialist, without the intervention of the G.P.,

the latter is becoming side-tracked more and more. As a result, General Practitioners are becoming not only victims of an inferiority complex, but there is developing a reluctance to refer patients to certain Specialists because of the fear that they will not be referred back and also because of the understandable feeling that there is direct economic competition between the two classes of practitioner. This applies with particular force in the case of the paediatrician and the obstetrician, who both accept patients coming to them directly, thereby depriving the G.P. of a large class of patients formerly prepared to entrust themselves to his care. At the same time this practice is, by implication, not only undermining the confidence of the public in the competence of the G.P. but also that of the G.P. in his own ability.

Nobody denies the phenomenal strides which medical science has made in the last 50 years and the inevitable tendency towards specialization which vast new developments in technique and knowledge have fostered. Nor is there any doubt about the invaluable service which the Specialist is able to render in the difficult case, whether the difficulty is one of diagnosis or prognosis or treatment. There, indeed, his service is inestimably valuable and, indeed, essential if the people are to be given all the benefits of modern medical advances.

The contention is that the G.P. is, or should be competent to handle all cases of illness of average severity, but that it should be his privilege and in fact his bounden duty to seek the assistance of the appropriate Specialists in the case where he feels that for any reason whatever he is not competent or equipped to handle that particular condition.

The *onus*, legally, morally and ethically should be on the General Practitioner to act in the best interests of his patient and where those interests would best be served by consultation with another practitioner, such consultation should be made available to the patient. In other words, the Specialist should be a *consultant* in status and service. This relationship between medical men *inter se*, and between the profession and the public, has until recent years been honourably observed and hallowed by tradition. It is the only means which we have of preserving the dignity of the doctor, whether he has chosen the hard way of serving his fellows in the sphere of general practice, or whether he has by his merit and ability been elevated to the ranks of the more remunerative forms of medical practice which registration as a Specialist implies.

There are numerous other causes which could be adduced for the present state of medical practice. Some have held that the system of medical education is at fault, in that students are taught by Specialists and thus develop a bias towards highly skilled and more remunerative specialized work. Medicine is not taught as an integrated whole and hence there is not an integrated approach to the sick human being.

Extreme specialization has resulted in the partition of the human organism into units, each of which has become the legitimate sphere and province of a particular speciality. The result is that the modern practitioner has to face the task of re-assembling this mass of bits and pieces, of sorting out and correlating the piles and piles of blue papers, reports and opinions which accumulate on the case sheet and which have to be re-integrated in order to come back again to a view and contemplation of the original patient as a physical and mental entity—all at great expense to the latter.

It is in the very nature of general practice that the sick individual is viewed and treated as a whole integrated personality, a member of a family and a unit in a particular social group with its own specific environment. Specialization, on the other hand, tends, by its own restriction of field and application, to look upon the sick person with the bias of that restricted field. The maximum benefits could be given to the public only if there was on the one hand a strong, efficient, competent, highly trained General Practitioner group, and on the other a Consultant group of men with special knowledge and skill in their specialities, who were willing to co-operate in the fullest measure on a basis of mutual trust and ethical rules.

What was needed was collaboration and not competition, integration and not dissolution, harmony and mutual respect, not inferior status for one group and a superior celestial status for the other.'

The President went on to say that this memorandum reflected the views of many General Practitioners, as expressed at that meeting, as well as his own and that he had presented them in this form in order to stimulate thought and discussion.

The Association and the S.A. Medical Council were vitally concerned with the present position in view of a strong feeling reflected in the following resolution adopted by the G.P. group of the Southern Transvaal Branch, viz.: 'That a Specialist should see a patient only in consultation with, or at the request of another practitioner.' In the debate which ensued the various speakers expressed their views as follows:

*Mr. Sweetapple*: I think that had it been known such a question of importance was being discussed this evening, any vote taken to-night would not be a true reflection of the Branch.

*Dr. Sampson*: I do not think the Specialists would all vote on one side and the General Practitioners on the other. We should try to approach this matter from the point of equity and fairness. G.P.'s should be able to see on both sides of the fence. The G.P.'s should be protected and safe-guarded.

*Dr. Lilian Raftery*: On a vote of this kind I am sure the Specialists will be voting with the General Practitioners. I find it very distressing that the majority of patients have no family doctor. It would save the time of the Specialist if patients were sent on to the Specialist from a family doctor.

*Dr. Mary Coutts*: As a General Practitioner I would like to support Dr. Raftery. If the Specialist Register is abolished quite a number of people will go off of it and enter into competition with the G.P.'s. The G.P. must be a G.P. only and not do work in the province of the surgeon, gynaecologist, paediatrician, etc.

*Dr. Steere*: What are the reasons behind the resolution passed by the General Practitioners? I think there is a lack of support of the ethical code to-day. No doctor will take action against a fellow colleague, but the Ethical Committee is there and should be able to deal with any doctor who transgresses. I think that most of us would welcome a Consultant Register.

*Dr. Friedlander* felt that the status of the General Practitioner had not declined, but rather the status of the Specialist.

*Dr. Pooler* felt that it was the fault of modern medicine that there was to-day no place for the family doctor. He did not think that a Consultant Register would ever come into being in this country.

*Dr. Renton*: What we have not discussed is the public itself. The public to-day is not educated to Consultants and until it is educated to it, one could hardly have this very laudable system of Consultants.

*Dr. Johnson* thought that the only solution is to have three registers: Consultant, Specialist and General Practitioner.

*Dr. Armstrong*: Two years ago this matter was ventilated at a Branch meeting and the proposal of a Consultant Register was turned down. I do not feel that the Specialists are really responsible for the decline in G.P. status. To-day a patient who lives well out of town visits the local G.P. for minor ailments, but sees the Specialist in town for major ailments. The family doctor still remains in the country, but in town his status is declining.

*Mr. Hill*: The so-called goodwill of practice has gone. I doubt whether G.P.'s in the country suffer in the same way as the G.P.'s in town. To-day families are divided in the matter of choice of doctor.

*Dr. P. Johnson*: The main reason is the Benefit Societies with their closed panel. Sometimes two or three doctors attend at one house.

*Dr Alan Taylor*: Possibly the decline of the G.P. status to-day is due to the fact that he does not study enough after graduation. In America a G.P. must give so many months in the year to post-graduate study.

*The President*: I would like to thank the various speakers for the views expressed. I am at a loss how to report to Federal Council. We have been given a resolution which was adopted by another G.P. group and what the local G.P. group should do with the resolution, I really do not know. The solution of the problem would be for the Minutes of this meeting to be sent to Federal Council so that the Council will know what the views of the Branch are. I have not heard any objections to the various statements made to the views

expressed and no objections to the establishment of a Consultant Register, but I agree with Mr. Sweetapple that this is not the appropriate occasion to take a definite resolution.

*Dr. Nelson*: Most of the G.P.'s are divorced from the hospitals and they should be able to take some part in hospital work.

*Dr. Macfadyen*: I propose that the Minutes be sent to Federal Council. Seconded by Dr. Grant Whyte.

*Dr. Sweetapple* suggested that a copy should also be sent to the *S.Af. Medical Journal*.

*Dr. Sampson*: The older G.P. should be raised to Specialist level and be allowed to charge Specialist fees.

*The President*: There was no formal resolution taken at the G.P. Group Meeting. The Group merely expressed its approval.

## BOOK REVIEW

### BRITISH SURGICAL PRACTICE

*British Surgical Practice, Volume 8.* Edited by Sir Ernest Rock Carling, F.R.C.S., F.R.C.P. and Sir James Paterson Ross, *K.C.V.O.*, M.S., F.R.C.S. (Pp. 597 + xxi. With 264 illustrations and nine plates. 66s.) Butterworth & Company Limited, 1 Lincoln's Court, Masonic Grove, Durban. 1950.

*Contents*: 1. Spleen—Surgery of. 2. Sterility and Sterilization. 3. Sterilization of Surgical Apparatus. 4. Stomach—Diseases of. 5. Strabismus and Heterophoria. 6. Subphrenic Abscess. 7. Supraspinatus Lesions. 8. Surgical Technique. 9. Surgical Technique—Wound Dressings. 10. Syphilis. 11. Tabes Dorsalis (Locomotor Ataxia). 12. Testicle and Tunica Vaginalis. 13. Tetanus. 14. Tetany. 15. Thoracic and Intrathoracic Injuries. 16. Thrombosis and Embolism. 17. Thymus Gland. 18. Thyroglossal Cyst, Sinus and Fistula. 19. Thyroid Gland—Diseases of. 20. Tonsilitis. 21. Tropical Disease—Surgery in. 22. Tuberculosis. 23. Typhoid Fever—Surgery in. 24. Ulcers and Ulceration. 25. Umbilicus—Diseases of. 26. Uraemia. 27. Ureter—Transplantation of. 28. Urethra and Bladder Congenital Malformations. 29. Urethra—New Growths and Stricture. 30. Urinary Antiseptics. 31. Uterus—Fibroids. 32. Uterus—Carcinoma of the Body. 33. Uterus—Cervix, and Vagina. 34. Uveal Tract. 35. Vascular Surgery. 36. Visceroptosis. 37. Visual Fields—Perimetry and Interpretation. 38. Vitamins and Nutrition in Relation to Surgery. 39. Vitreous—Injuries and Diseases. 40. Volvulus. 41. Yaws.

This concluding volume marks a fitting *finale* to this series. We have reviewed the previous volumes in considerable detail and there can be little doubt that this British contribution to surgical practice will hold its own throughout the English-speaking world as an encyclopaedic account of the modern principles of diagnosis and treatment in the field of surgery.

The scope of *British Surgical Practice* includes the surgery of the specialties and the illustrations continue to maintain the high standard and quality, lucidity and expressiveness characteristic of those in the previous volumes.

Important also is the up-to-date account of vascular surgery which occupies so important a place in so many branches of medicine. By accident of the alphabet, a considerable amount of thoracic surgery not only forms an important section of the present volume, but also illustrates the sound application of anatomical and physiological principles to the study of disease—a feature characteristic of the way in which all surgical problems have been treated throughout the eight volumes.

*British Surgical Practice* is a distinguished addition to clinical literature and will undoubtedly enjoy wide support throughout the English-speaking world.

## CORRESPONDENCE

### SPESIALISTE EN ALGEMENE PRAKTISYNS

*Aan die Redakteur*: Met groot belangstelling het ek *Specialist* (ex *G.P.*) se brief in u uitgawe van 17 Februarie 1951 gelees en nadat ek oor die saak bietjie nagedink het, het ek hom waarlik jammer gekry.

Hy verkeer vandag in dieselfde posisie as talle van sy vriende wat ook blykbaar soos hy 'n *G.P. Specialist* wil wees en 'n sluik algemene praktyk onder die skuilnaam spesialis voer.

Dit is verblydend dat die Federale Raad die probleem besef en daar 'n roeping is om sake te probeer verbeter. As 'n mens die saak onbevooroordeeld in oënskou neem, is daar wel duidelik 'n oplossing en dit sonder veel getorring aan konstitusie en wette.

In ons land was die posisie tot omtrent 1935-36 min of meer as volg. Die algemene praktisyn-spesialis getalle verhouding was in 'n goeie balans sodat soveel gevalle na die spesialis verwys was vir konsultasie en behandeling dat hulle nie tyd of lus had om te lol met klein dingetjies wat die praktisyn net so goed kon toepas nie.

Vanaf 1938-40 en daarna was daar so 'n magdom kollegas wat gelok is deur die skynbaar lekker lewe en groot rykdom van die spesialis dat hulle by die tientalle oorsee gestorm het en hulle hoëre grade gaan haal het. By hulle terugkeer was hulle nie tevrede om hulle meerdere kennis tot die beskikking van hul medemens te stel en die publiek te dien nie, maar het ook in die groot stede in een of ander groot gebou hulle bordjie gaan hang as ‚Mr. Spesialis'. Die gevolg was dat die algemene praktisyns nog maar na die ou bekendes hulle pasiënte gestuur het en ‚Mr. Spesialis' se kennis asook sy hande het geroes, en hy moes begin algemene praktyk so agteraf doen om te kan bestaan.

Die gevolg van alles is dat daar vandag ‚Mr. Spesialiste' is wat minder bevoegd is as hul algemene praktisyn kollegas. (Hier praat ek van wat ek self gesien het in Johannesburg.) Een van die manne wat gou 'n dubbele F.R.C.S. gaan haal het, het ingeskryf om sommer maar, aangesien hy nou grade jag, sy Ch.M. ook te oes. Vir sy praktiese operatiewe werk moes hy 'n kroniese blindederm verwyder. Hy het sy eie modifikasie van 'n McBurney rooster-snit gemaak en na 'n rukkie se rondpeuter met die pasiënt se derms, vol selfvertroue omgedraai en vir die Professor agter hom gesê: ‚Sir, this man has no appendix.' Die assistent het die blindederm verwyder. Hierdie selfde ‚Mr. Spesialis' se bordjie hang ook in 'n groot gebou in 'n stad van ons land.

Die enigste oplossing is om weer die getal verhouding van spesialiste tot algemene praktisyns reg te kry, en daardie manne wat dan spesialiste is moet uitstaande kennis van hul vak hê en nie soos vandag maar net soveel en soms nog minder weet as hulle A.P.-kollegas nie.

U sal wel vra en wat van dié wat hoëre grade het en tog nie registreer as spesialis nie. Daardie persone is vandag taamlik volop in die land en hulle word vergoed deur die genot wat daar in werk is wanneer jy weet dat wat jy doen reg en die beste is, en deur hulle meerdere kennis en beter behandeling trek hulle meer en beter pasiënte wat sodoende ook vir hulle hul pennies lewer.

Ongelukkig blyk dit uit *Specialist* (ex *G.P.*) se laaste aanmerking dat hy ook soos 99.9 persent van ons meer dink aan die £. s. d. as aan die werklike welsyn van die pasiënt en daardeur 'n ‚edele roeping?' laat verval tot 'n bloot besigheidstransaksie.

*Nog steeds A.P.*

10 Maart 1951.

### A TREATMENT FOR MUMPS?

*To the Editor*: May I ask whether there is any specific treatment for mumps?

P.E.

13 March 1951.

### CONTRACT PRACTICE

*To the Editor*: On reading the latest minutes available of Federal Council as published in the *Journal* of 3 March, one notices with great satisfaction, as far as I personally am concerned, that the excellent report which was drawn up by Dr. J. P. de Villiers and his Committee *re Health Services* (this *Journal*, 4 March 1950) has now been formally adopted by Federal Council.

Reading further on, one comes to item 62 'relations with Medical Aid Societies'. It has been known for some time now that the 'Advisory Council' which acts apparently as a sort of Control Board over Medical Aid Societies has been keen on even greater control and this they can get by having representatives on a Joint Committee with members of the Central Committee for Contract Practice, then they will, so they apparently feel, be able to *control* both ways, i.e. not only their own individual Societies but also the medical practitioners as well, by virtue of the number of members they have, which by now can surely not be less than at least 150,000. This is extremely important and we must realize that, unless we are very careful, we can almost assume with a fair amount of certainty that a similar request will be made at some future date sooner than later.

The Central Committee for Contract Practice should therefore be congratulated on the timely and definite decisions in this most important matter. We who are members of our Medical Association feel that we should get not only guidance but also protection from Federal Council.

I mention this expressly because if we had item 63 it will, on careful study, appear to confirm my fear pretty obviously.

Cape Town has, as far as I am aware, a so-called Southern Council of Medical Aid Societies. This Council appears to have passed four resolutions or proposals which may or may not already in fact be part of their constitution; these resolutions were apparently brought before the Cape Western Branch Contract Committee and this Committee actually recommended the adoption of these proposals by the Central Committee for Contract Practice. The Central Committee, however, may have made a better study of the proposals and their implications and so refused to sponsor their adoption by Federal Council. It seems almost incredible that the local Committee overlooked the fact that the Southern Council, according to the minutes, desires absolute control over its member Societies. In other words the very important point in Dr. de Villiers' report on Health Services (4 March 1950) that 'individual Societies should retain their identity', will *ipso facto* fall away, as no Society could possibly, in my humble opinion, retain any semblance of individuality if it is to be subjected to such rigid control by member societies.

Surely the statutory controlling body is and should remain the Medical Association which will not, to my knowledge, have an axe to grind with any Medical Aid Society, provided it plays the game. On the other hand, we as doctors are entitled to be protected from the possibility of having to conform to rules and regulations which may in the future be foisted upon us by a pseudo-Medical Council, self-styled Medical Aid Councils Control Board.

This, in my humble opinion, is a very important matter and the Federal Council should take cognizance of it before it is too late.

In conclusion, I suggest the following Committee to go into this matter collectively and/or individually:—

1. The President of the Medical Association.
2. The Secretary of the Medical Association.
3. The President of the Cape Western Branch.
4. Chairman of the C.C.C.P.
5. The Chairman of the Contract Practice (Cape Town).
6. The Secretary of an unaffiliated Medical Aid Society, i.e. a Society not now a member of the Southern Council.

*Medical Practitioner, Quo Vadis?*

14 March 1951.

### CERTIFICATES FOR INTERNATIONAL TRAVEL

*To the Editor*: I write to confirm the information given by Dr. M. L. Freedman in a letter to the *Journal* for 10 March and to thank him for drawing the attention of the profession to it. The memorandum by myself, which appeared in the *Journal* for 10 February, was written prior to receipt of the withdrawal notice quoted by Dr. Freedman, and I regret that I omitted to notify you of the change.

I may add that the delay in publication of my memorandum was for reasons known and agreed to by myself.

G. W. Gale,
*Secretary for Health.*

Department of Health,
P.O. Box 3879,
Cape Town.
16 March 1951.

### CANCER OF THE BREAST

*To the Editor*: Dr. Weinbren and I need not argue the merits of 'cancer drill' as a means of detecting early cases of cancer of the breast. The problem is nearly solved. For the Three Therapists of Hospital Hill, like the Nine Tailors of Tooley Street, have a message for the world. 'With the best modern technique, except where distant bone or visceral metastases are already present, *every case of breast cancer can be cured.*' (Italics from Hospital Hill.) Furthermore, 'an internal mammary metastasis is no serious problem being as readily curable as an axillary node'.

I confess this heartening news is news indeed to me. But, then, it would appear to be outside Dr. Weinbren's ken as well and he is not unknown in the field of radiotherapy. Yet he tells us that 'taking the stage 2 group as a whole not more than about 30% can hope for a five-year survival rate'.

Oliver Wendell Holmes once said: 'Scientific knowledge, even in the most modest persons, has mingled with it something which partakes of insolence'. But is it insolence or scientific knowledge which asserts that 'the majority of the world's therapy centres, not excluding some of the largest and best-known American hospitals and their many imitators in South Africa and abroad do not meet the stringent requirements of the highest standards of therapy?'

George Sacks.

National Mutual Building,
Church Square,
Cape Town.
17 March 1951.

*To the Editor*: Mr. G. Sacks' article on this subject which appeared on 10 February 1951 is one that must have made us reconsider and revise many of our opinions on the matter.

I do not think that surgical 'cure' in the sense of complete eradication of the disease is often achieved; in the majority of patients who do survive, the disease is under control only. I believe that a patient who has had a radical mastectomy is in a state of 'equilibrium', and is controlling the remnants of her cancer with that degree of resistance that her body can maintain.

It is well known that a severe intercurrent illness in such cases may be followed by metastases within a very short time and most surgeons feel that, to the patient, there is little difference in this respect between operation and illness. Thus a patient who has survived a radical mastectomy should not be subjected to operations of any type unless these are absolutely essential. Such operations as must be performed should be limited in their scope. The judgment and experience of the surgeon should determine this.

A clearer appreciation of this would benefit many people.

Th. Schrire.

1 Hof Street,
Cape Town.
19 March 1951.

# The Medical Association of South Africa
# Die Mediese Vereniging van Suid-Afrika

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**(Pr/S23)** Progressive practice in S. Rhodesian hospital town. Excellent opportunity for young G.P. Present income £3,000–£4,000 p.a. Premium for goodwill £3,000. Terms accepted. £1,000 for book debts, surgery furniture, drugs, etc. Block of professional rooms and living quarters to rent at £30 p.m.

**ASSISTENT VERLANG : ASSISTANT REQUIRED**

**(A/O22)** Assistant required for West Rand practice. View to partnership. Applicant must be bilingual gentile with at least 2 years' experience. Terms during assistantship £2 2s. p.d. plus car allowance and surgery expenses.

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## CAPE TOWN : KAAPSTAD

Medical House, P.O. Box 643, Cape Town. Telephone 2-6177
Mediese Huis, Posbus 643, Kaapstad. Telefoon 2-6177

**PRAKTYKE TE KOOP : PRACTICES FOR SALE**

**(673)** Near Durban. Average gross receipts £1,650 p.a. Prescribing. Premium required £1,275. One appointment £200 p.a. Good scope for expansion. Double-storied seven-roomed house situated on 1½ acres and separate surgery building for sale at £6,500. Surgery may possibly be rented by arrangement at approx. £8 p.m. Picturesque surroundings. Climate notably cooler than that of the coast. English community.

**(674) Vennootskap aandeel in Bolandse praktyk.** Vooruitstrewende veelsydige boeregemeenskap. £1,224 gemiddelde netto jaarlikse wins aan aandeel verbonde. Twee aanstellings. Huis te koop teen £3,300 maar is nie deel van praktyk nie of 'n voorwaarde vir koop van praktyk nie. Premie verlang £650. Paaiemente vir betaling oor 12 maande kan gereël word. Geneesmiddels en sekere spreekkamermeubels te koop teen £150. Praktyk bied uitstekende geleenthede aan.

**(662)** Platteland. Ontvangste vir afgelope 13 maande £1,766 13s. Premie verlang vir klandisiewaarde en meubels £1,000, £600 kontant, balans paaiemente. Huishuur £6 10s. p.m.

**(644)** Durban Central. Mainly Indian and Native cash practice. Average annual gross income £1,235. Premium of £500 required for goodwill, inclusive of furniture and fittings and drugs. Terms may be arranged.

**(365)** North-west Cape. Two appointments held. Gross income 1949 £1,648. Premium £550. House and surgery at low rentals. Nursing home being built. Afrikaans community.

**(529)** Eastern Province hospital town. D.S. Premium £1,500 includes fully-equipped surgery. Terms if necessary.

**(631)** Natal South Coast. Very modern recently built house on one acre and nucleus of practice with average income of £50 per month. No premium required for goodwill. House for sale at £6,600 or to let at £30-£35 per month.

**(511)** Vennootskap-aandeel in **Suidelike Voorstad, Kaapstad.** Vennootskapinkomste ongeveer £5,000 per jaar. Twee aanstellings. Afrikaner word verlang. Premie na gelang aandeel wat verkoop word.

**ASSISTENTE VERLANG : ASSISTANTS REQUIRED**

**(650)** An assistant for Native practice. Transkei. Salary for 3 months £60 p.m. plus board and lodging and transport. After 3 months' probation, salary on sliding scale, maximum £100 p.m. plus transport allowance of 9d. per mile, with view to partnership for suitable gentile.

## Siekefonds van die Suid-Afrikaanse Spoorweë en Hawens

### AANSTELLING VAN KINDERSPESIALIS, JOHANNESBURG

Applikasies word van geregistreerde Kinderspesialiste ingewag vir die betrekking van Kinderspesialis, Johannesburg, teen 'n salaris van £773 per jaar, plus gelde en toelaes wat in die regulasies van die Siekefonds voorgeskryf word, en met die reg om privaat te praktiseer.

Die salaris is onderhewig aan wysiging in ooreenstemming die sensus van lede wat op 1 April van elke jaar afgeneem moet word.

Die aanstelling geskied kragtens die regulasies van die Siekefonds, en opsegging van dienste is onderworpe aan vier maande kennisgewing deur een van beide partye.

Die suksesvolle applikant moet in Johannesburg woon, diens aanvaar op 'n datum wat gereël sal word, en sy pligte ooreenkomstig die regulasies van die Siekefonds uitvoer.

Aansoeke moet die Distriksekretaris, Distriksiekefondsraad, Wes-Transvaal, Kamer 342, Derde Verdieping, Nuwe Stasiegebou, Johannesburg, nie later nie as 5 Mei 1951 bereik, en applikante moet die volgende vermeld:—

1. Volle naam.
2. Kwalifikasies (waar en wanneer verkry).
3. Ondervinding (waar en wanneer verkry en opgedoen).
4. Datum van geboorte.
5. Land van geboorte.
6. Getroud of ongetroud.
7. Of ten volle tweetalig.
8. Of Suid-Afrikaanse burger.
9. Watter staatsbetrekking, indien enige, beklee word.

Werwing deur of ten behoewe van enige applikant stel so 'n applikant bloot aan diskwalifikasie.

Enige verder besonderhede wat verlang word, kan op aanvraag van die Distriksekretaris by die bovermelde adres verkry word.

P. J. Klem
*Hoofsekretaris*
(79)

Johannesburg
7 April 1951

## Rhodesia Railways

### MEDICAL DEPARTMENT

Applications are invited from registered medical practitioners for a whole-time Extern Railway Medical Officer. Private practice will not be allowed.

Salary £1,370 to £2,120 (pensionable) by increments and subject to efficiency barriers; cost-of-living and children's allowance and leave conditions apply in accordance with Railway Regulations.

There is a three years' probationary period. Successful applicant will be required to assume duty on or about 1 June 1951.

Previous experience in hospitals, general practice and anaesthetics is essential.

Duties are chiefly those of conducting a clinic for Africans in the Railway African Township, Bulawayo, and other duties of a general practitioner as allocated by the Chief Medical Officer. Duties do not include the attendance on hospitalized patients.

Further information and particulars will be supplied to suitable applicants.

Applications stating age, qualifications, previous experience, birth-place, nationality, civil status and copies of recent testimonials should be forwarded not later than 12 April 1951 to:—

The Chief Medical Officer
Rhodesia Railways
P.O. Box 792
Bulawayo

A.D.4640

## Wanted to Purchase

Small X-ray apparatus in good condition, preferably portable. Fluoroscopic screen, heavy rubber gloves and apron. Write to 'A. F. P.', P.O. Box 643, Cape Town.

## Natal Industries Medical Aid Society

Applications are invited from medical practitioners in Durban for the post of medical referee to the above Society. The duties appertaining to the post are the screening of such written applications for membership as may be referred to the medical referee by the Management Committee from time to time, to advise the latter body on all medical matters concerning the Society, and to act as medical referee in all cases referred to him by the Management Committee. Such physical examinations as the Management Committee may require will be undertaken by the medical referee at standard tariff rates of payment.

The remuneration attaching to the post is a retaining fee of £25 per annum, plus two guineas per hour for work undertaken at the request of the Management Committee, and attendance at Meetings of the latter body.

Replies should be marked 'Appointment' and addressed to the Secretary, Natal Industries Medical Aid Society, P.O. Box 1300, Durban.

## Assistantship Required

A well-experienced, English-speaking general practitioner; married; T.T.; qualified Edinburgh 1941; bilingual; studied F.R.C.S. unsuccessfully. Practical surgery for the last 3 years. Has held a registrar's post, general, gynaecological and orthopaedic surgery. Excellent testimonials. Returning to South Africa on 31 May 1951. Desires assistantship general practice with a view to partnership, preferably at or near the coast. Capital available. Reply to 'A. F. R.', P.O. Box 643, Cape Town.

## For Sale

Gynaecological table complete with stirrups and other fittings, as good as new. Write to 'A. F. V.', P.O. Box 643, Cape Town.

## Required

Two or three rooms required immediately by a specialist. Willing to share. Write to 'A. F. T.', P.O. Box 643, Cape Town.



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